

## CLAIMS

What is Claimed, is:

1. A method of managing a distributed computer system comprising a  
5 plurality of nodes coupled to a switch, said method comprising:
  - a) receiving status of a port of said switch;
  - b) responsive to said status meeting a condition, receiving a node  
identifier from said switch for a node coupled to said port; and
  - c) maintaining a table of data groups comprising port identifiers and node  
10 identifiers of nodes coupled to ports of said switch.
2. The method of claim 1, wherein said a) comprises requesting agent code  
of said switch for port status.
- 15 3. The method of Claim 2, wherein said b) comprises, responsive to said  
status meeting a condition, requesting said agent code for identifiers of nodes  
connected to said port.
4. The method of Claim 1, wherein said b) comprises, responsive to said  
20 status meeting a condition, requesting agent code of said switch for identifiers of  
nodes connected to said port.

5. The method of Claim 1, wherein the status of a port of said a) indicates that the port is up or down.

6. The method of Claim 1, wherein the status of a port of said a) indicates,  
5 when the port is up, that the node identifier is known or unknown.

7. The method of Claim 1, wherein the condition of said b) comprises that the port status is up and indicates that the node identifier is known.

10 8. The method of Claim 1, wherein:  
said a) comprises receiving a message from the switch indicating a new  
port status; and  
said b) comprises:  
if the port status is down, invalidating a data group in the table  
15 having the same port identifier;  
else, responsive to said status meeting the given condition,  
requesting agent code of the switch for the identifier of the node  
connected to said port.

20 9. The method of Claim 1, wherein said c) comprises comparing the node identifier received in said b) with the node identifier in the table for said port and responsive to a difference between the received node identifier and the node

identifier in the table, updating the node identifier associated with the port identifier in the table for the said port.

10. The method of Claim 1, wherein the port identifier is a port number.

5

11. The method of Claim 1, wherein the data groups in the table comprise the time of the storage of the port and the node identifiers.

12. The method of Claim 1, wherein said a) to said c) are repeated regularly to request a node identifier connected to a port identifier and to update the table.

13. A distributed computer system comprising:  
a switch having ports and comprising agent code operable to report status of said ports and to identify a node coupled to ones of said ports; and  
15 a node coupled to said switch and comprising manager code operable to:  
retrieve, from said switch, status of a port of said switch;  
request, from said switch, an identifier of a node coupled to said  
port of said switch in response to status for said port meeting a condition;  
and  
20 maintain a table of data groups comprising port identifiers and  
identifiers of nodes coupled to said ports.

14. The distributed computer system of Claim 13, wherein the manager code is further operable to request the agent code for status of said ports and, responsive to said status meeting a given condition, request the agent code for identifiers of the nodes connected to said ports.

5

15. The distributed computer system of Claim 13, wherein the status of a port indicates that the port is up or down.

16. The distributed computer system of Claim 13, wherein the status of a port indicates, when the port is up, that the node identifier is known or unknown.

10

17. The distributed computer system of Claim 13, wherein the condition comprises that the port status is up and indicates that the node identifier is known.

15

18. The distributed computer system of Claim 13, wherein the agent code is further operable to send a message indicating a new port status and, the manager code is further operable to:

i) if the new port status is down, invalidate a data group in the table having the same port identifier,

20

ii) else, responsive to said new port status meeting the condition,  
request the agent code for the identifier of the node connected to said  
port.

5 19. The distributed computer system of Claim 13, wherein the manager code  
is further operable to:

compare a received node identifier for a port with a node identifier in the  
table for said port; and

responsive to a difference between the received node identifier and the  
10 node identifier in the table, update the node identifier associated with the port  
identifier in the table for said port.

20. The distributed computer system of Claim 13, wherein the port identifier is  
a port number.

15

21. The distributed computer system of Claim 13, wherein the data groups in  
the table comprise the time for the storage of the port and the node identifiers.

22. The distributed computer system of Claim 13, wherein the manager code  
20 is further operable to repeatedly request the node identifier of a port identifier.

23. A computer readable medium having stored therein instructions which when executed on a processor implement a method of managing a distributed computer system comprising a plurality of nodes coupled to a switch, said method comprising:

- 5 a) receiving status of a port of said switch;
- b) responsive to said status meeting a condition, receiving a node identifier from said switch for a node coupled to said port; and
- c) maintaining a table of data groups comprising port identifiers and node identifiers of nodes coupled to ports of said switch.

10

24. The computer readable medium of Claim 23, wherein said a) of said method comprises requesting agent code of said switch for port status.

25. The computer readable medium of Claim 23, wherein said ) of said  
15 method comprises, responsive to said status meeting a condition, requesting said agent code for identifiers of nodes connected to said port.

26. The computer readable medium of Claim 23, wherein said b) of said  
method comprises, responsive to said status meeting a condition, requesting  
20 agent code of said switch for identifiers of nodes connected to said port.

27. The computer readable medium of Claim 23, wherein the status of a port of said a) of said method indicates that the port is up or down.

28. The computer readable medium of Claim 23, wherein the status of a port of said a) of said method indicates, when the port is up, that the node identifier is known or unknown.

29. The computer readable medium of Claim 23, wherein the condition of said b) of said method comprises that the port status is up and indicates that the node identifier is known.

30. The computer readable medium of Claim 23, wherein:  
the status said a) of said method comprises receiving a message from the switch indicating a new port status; and

15 said b) of said method comprises:

if the port status is down, invalidating a data group in the table having the same port identifier;

else, responsive to said status meeting the given condition,  
requesting agent code of the switch for the identifier of the node  
20 connected to said port.

31. The computer readable medium of Claim 23, wherein:

said c) of said method comprises comparing the node identifier received in  
said b) of said method with the node identifier in the table for said port and  
responsive to a difference between the received node identifier and the node  
5 identifier in the table, updating the node identifier associated with the port  
identifier in the table for the said port.

32. The computer readable medium of Claim 23, wherein the port identifier is  
a port number.

10

33. The computer readable medium of Claim 23, wherein the data groups in  
the table comprise the time of the storage of the port and the node identifiers.

34. The computer readable medium of Claim 23, wherein said a) of said  
15 method to said c) of said method are repeated regularly to request a node  
identifier connected to a port identifier and to update the table.